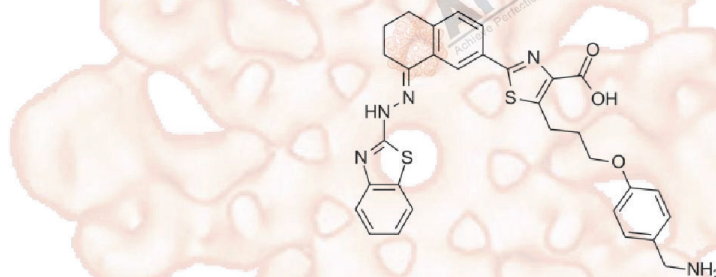


Product Data Sheet

WEHI-539

Cat. No.:	A3935
CAS No.:	1431866-33-9
Formula:	C31H29N5O3S2
M.Wt:	583.72
Synonyms:	WEHI539, WEHI 539
Target:	Apoptosis
Pathway:	Bcl-xL
Storage:	Store at -20°C



Solvent & Solubility

insoluble in DMSO; insoluble in H2O; insoluble in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	1.7132 mL	8.5658 mL	17.1315 mL
	5 mM	0.3426 mL	1.7132 mL	3.4263 mL
	10 mM	0.1713 mL	0.8566 mL	1.7132 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Bcl-xL inhibitor, potent and selective

IC₅₀ & Target

1.1 nM (BCL-XL)

In Vitro

Cell Viability Assay

Cell Line: Human colon cancer cell

Reacting conditions: 1 μM, 24h

Applications: Limiting dilution analysis with CSCs that were pre-treated with ABT-737, ABT-199 or WEHI-539 revealed that ABT-737 and WEHI-539 both were sufficient to decrease clonogenic capacity, whereas ABT-199 did not affect clonogenic growth. As WEHI-539 is selective for BCLXL, this points to a

dependency of CSCs on BCLXL for survival. Importantly, ABT-737- or WEHI-539-induced loss of clonogenicity could be restored when BCLXL was ectopically overexpressed. When spheroid cultures were treated with ABT-737 or WEHI-539 compounds, CSCs were effectively sensitized toward oxaliplatin and other chemotherapeutic agents.

In Vivo

Animal experiment

Applications:

Product Citations

1. Yasmeen A. Albalawi, Srinivas D. Narasipura, et al. "Wnt/ β -Catenin Protects Lymphocytes from HIV-Mediated Apoptosis via Induction of Bcl-xL." *Viruses*. 2022 Jul 2;14(7):1469. PMID: 35891449
2. Kirsteen J. Campbell, Susan M. Mason, et al. "Breast cancer dependence on MCL-1 is due to its canonical anti-apoptotic function." *Cell Death Differ*. 2021 Sep;28(9):2589-2600. PMID: 33785871
3. Sanne Venneker, Alwine B. Kruisselbrink, et al. "Beyond the influence of idh mutations: Exploring epigenetic vulnerabilities in chondrosarcoma." *Cancers (Basel)*. 2020 Nov 30;12(12):E3589. PMID: 33266275
4. Enyuan Shang, Trang T. T. Nguyen, et al. "Epigenetic Targeting of Mcl-1 Is Synthetically Lethal with Bcl-xL/Bcl-2 Inhibition in Model Systems of Glioblastoma." *Cancers* 2020, 12(8), 2137;1 August 2020. PMID: 32752193
5. Meyer L, Verbist KC, et al. "JAK/STAT pathway inhibition sensitizes CD8 T cells to dexamethasone-induced apoptosis in hyperinflammation." *Blood*. 2020;blood.2020006075. PMID: 32530039

See more customer validations on www.apexbt.com.

References

1. Colak S, Zimmerlin CD, Fessler E et al. Decreased mitochondrial priming determines chemoresistance of colon cancer stem cells. *Cell Death Differ*. 2014 Jul;21(7):1170-7.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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